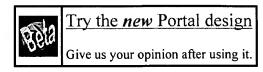
L Number	Hits	Search Text	DB	Time stamp
2	159	(forward adj chai\$) and (backward adj	USPAT;	2004/03/01 16:28
		chai\$)	EPO; JPO;	
			DERWENT;	
			IBM TDB	
3	6	(forward adj chai\$) and (backward adj	USPAT;	2004/03/01 16:28
		chai\$) and (713/\$.ccls. 380/\$.ccls.)	EPO; JPO;	
			DERWENT;	
			IBM TDB	
4	88	(((forw\$ backw\$) adj chai\$) infere\$) and	USPĀT;	2004/03/01 16:28
		(713/\$.ccls. 380/\$.ccls.)	EPO; JPO;	
			DERWENT;	İ
			IBM TDB	
5	268	706/47.ccls.	USPAT;	2004/03/01 16:28
			EPO; JPO;	
			DERWENT;	
			IBM TDB	
6	6	706/47.ccls. and (713/\$.ccls. 380/\$.ccls.)	USPĀT;	2004/03/01 16:28
			EPO; JPO;	
1			DERWENT;	
			IBM TDB	
7	10	706/47.ccls. and (intrusion attack virus)	USPĀT;	2004/03/01 16:28
			EPO; JPO;	
İ			DERWENT;	
	!		IBM TDB	1
8	32	706/45,46,48.ccls. and (intrusion attack	USPAT;	2004/03/01 16:28
i		virus)	EPO; JPO;	
			DERWENT;	
			IBM TDB	
9	46	706/934.ccls.	USPAT;	2004/03/01 16:28
			EPO; JPO;	
			DERWENT;	
		•	IBM_TDB	
10	24	706/908.ccls.	USPAT;	2004/03/01 16:28
			EPO; JPO;	
			DERWENT;	
			IBM_TDB	



> feedback > home ∴ > about **US Patent & Trademark Office** 



Citation

Conference on Knowledge Discovery in Data >archive Proceedings of the fifth ACM SIGKDD international conference on Knowledge discovery and data mining >toc 1999, San Diego, California, United States

# Mining in a data-flow environment: experience in network intrusion detection

### **Authors**

Wenke Lee Salvatore J. Stolfo Kui W. Mok

## **Sponsors**

SIGKDD: ACM Special Interest Group on Knowledge Discovery in Data

AAAI: Am Assoc for Artifical Intelligence

SIGART: ACM Special Interest Group on Artificial Intelligence SIGMOD: ACM Special Interest Group on Management of Data

#### **Publisher**

ACM Press New York, NY, USA

Pages: 114 - 124 Series-Proceeding-Article

Year of Publication: 1999 ISBN:1-58113-143-7

doi> http://doi.acm.org/10.1145/312129.312212 (Use this link to Bookmark this page)

> full text > references > citings > index terms

> Similar > Discuss

> Review this Article

Save to Binder

> BibTex Format

Access Rules ↑ FULL TEXT:

🔀 pdf 1.26 MB

## **↑ REFERENCES**

Note: OCR errors may be found in this Reference List extracted from the full text article. ACM has opted to expose the complete List rather than only correct and linked references.

AIS93 Rakesh Agrawal, Tomasz Imieliński, Arun Swami, Mining association rules between sets of items in large databases, Proceedings of the 1993 ACM SIGMOD international conference on Management of data, p.207-216, May 25-28, 1993, Washington, D.C., United States

Coh95 W.W. Cohen. Fast effective rule induction. In Machine Learning: the 12th International Conference, Lake Taho, CA, 1995. Morgan Kaufmann.

CS93 P.K. Chan and S. J. Stolfo. Toward parallel and distributed learning by meta-learning. In AAAI Workshop in Knowledge Discovery in Databases, pages 227-240, 1993.

FP97 T. Fawcett and F. Provost. Adaptive fraud detection. Data Mining and Knowledge Discovery, 1:291-316, 1997.

FPSS96 Usama Fayyad , Gregory Piatetsky-Shapiro , Padhraic Smyth, The KDD process for extracting useful knowledge from volumes of data, Communications of the ACM, v.39 n.11, p.27-34, Nov. 1996

JH94 N. Japkowicz and H. Hirsh. Towards a bootstrapping approach to constructive induction. in Working Notes of the Workshop on Constructive Induction and Change of Representation, 1994.

JLM89 V. Jacobson, C. Leres, and S. McCanne. tcpdump, available via anonymous ftp to ftp.ee.lbl.gov, June 1989.

LSM98 W. Lee, S. J. Stolfo, and K. W. Mok. Mining audit data to build intrusion detection models. In Proceedings of the j th International Conference on Knowledge Discovery and Data Mining, New York, NY, August 1998. AAAI Press.

LSM99 W. Lee, S. J. Stolfo, and K. W. Mok. A data mining framework for building intrusion detection models, in Proceedings of the 1999 IEEE Symposium on Security and Privacy, May 1999.

MTV95 H. Mannila, H. Toivonen, and A. i. Verkamo. Discovering frequent episodes in sequences. In Proceedings of the 1st International Conference on Knowledge Discovery in Databases and Data Mining, Montreal, Canada, August 1995.

NFR Network Flight Recorder Inc. Network flight recorder, http://www.nfr.com, 1997.

Tur95 P.D. Turney. Cost-sensitive classification: Empirical evaluation of a hybrid genetic decision tree induction algorithm. Journal of Artificial Intelligence Research, 2(1995):369-409, 1995.

# **↑ CITINGS 8**

Kenji Yamanishi , Jun-Ichi Takeuchi , Graham Williams , Peter Milne, On-line unsupervised outlier detection using finite mixtures with discounting learning algorithms, Proceedings of the sixth ACM SIGKDD international conference on Knowledge discovery and data mining, p.320-324, August 20-23, 2000, Boston, Massachusetts, United States

Jeffrey Vetter, Performance analysis of distributed applications using automatic classification of communication inefficiencies, Proceedings of the 14th international conference on Supercomputing, p.245-254, May 08-11, 2000, Santa Fe, New Mexico, United States

Wenke Lee, Applying data mining to intrusion detection: the quest for automation, efficiency, and credibility, ACM SIGKDD Explorations Newsletter, v.4 n.2, p.35-42, December 2002

Wenke Lee, Wei Fan, Mining system audit data: opportunities and challenges, ACM SIGMOD Record, v.30 n.4, December 2001

Wenke Lee, Salvatore J. Stolfo, Kui W. Mok, Algorithms for mining system audit data, Data mining, rough sets and granular computing, Physica-Verlag GmbH, Heidelberg, Germany, 2002

Salvatore J. Stolfo , Wenke Lee , Philip K. Chan , Wei Fan , Eleazar Eskin, Data mining-based intrusion detectors: an overview of the columbia IDS project, ACM SIGMOD Record, v.30 n.4, December 2001

Wenke Lee , Salvatore J. Stolfo, A framework for constructing features and models for intrusion detection systems, ACM Transactions on Information and System Security (TISSEC), v.3 n.4, p.227-261, Nov. 2000

Christopher Kruegel, Giovanni Vigna, Anomaly detection of web-based attacks, Proceedings of the 10th ACM conference on Computer and communication security, October 27-30, 2003, Washington D.C., USA

#### **↑ INDEX TERMS**

# **Primary Classification:**

H. Information Systems

+.2 DATABASE MANAGEMENT

← **H.2.8** Database applications

Subjects: Data mining

#### **Additional Classification:**

C. Computer Systems Organization

C.1 PROCESSOR ARCHITECTURES

C.1.3 Other Architecture Styles

Subjects: Data-flow architectures

← C.2 COMPUTER-COMMUNICATION NETWORKS

H. Information Systems

← H.2 DATABASE MANAGEMENT

+ H.2.7 Database Administration

Subjects: Security, integrity, and protection

K. Computing Milieux

K.6 MANAGEMENT OF COMPUTING AND INFORMATION SYSTEMS

# **General Terms:**

Design, Experimentation, Management, Measurement, Performance, Security, Theory

The ACM Portal is published by the Association for Computing Machinery. Copyright © 2004 ACM, Inc.

Advances in Knowledge Discovery and Data Mining. AAAI Press / MIT Press 1996, ISBN 0-262-56097-6

Contents

DBLP: [<u>Home</u> | Search: <u>Author</u>, <u>Title</u> | <u>Conferences</u> | <u>Journals</u>]

<u>Copyright</u> © Fri Feb 27 14:03:25 2004 by <u>Michael Ley</u> (<u>ley@uni-trier.de</u>)